# **Frequently Asked Questions**

The **Chicago Energy Benchmarking ordinance** raises awareness of energy performance through information and transparency, with the goal of unlocking energy and cost savings opportunities for businesses and residents. To comply, owners will gather building and energy data, enter it into ENERGY STAR Portfolio Manager, have the data verified, and share it with the City. For more information on the topics below, please visit www.CityofChicago.org/EnergyBenchmarking.

# Ordinance Background

## What is "Chicago Energy Benchmarking"?

In September 2013, Mayor Emanuel and Chicago's City Council adopted the Chicago Energy Benchmarking ordinance to raise awareness of energy performance through information and transparency, with the goal of **unlocking energy and cost savings opportunities** for businesses and residents. The ordinance calls on existing municipal, commercial, and residential buildings 50,000 square feet and larger to track whole-building energy use, report to the City annually, and verify data accuracy every three years. The law covers less than 1% of Chicago's buildings, which together account for roughly 20% of total energy used by all buildings, and focuses on creating information that will enable better decision-making around building energy use.

## Does the ordinance require mandatory improvements, audits, or retrofits?

No. This ordinance will help building managers and owners make their own choices about whether and how to save money by becoming more energy efficient.

# Why did the City pass this ordinance?

Chicago Energy Benchmarking seeks to promote building energy use awareness and transparency, with the goal of accelerating the market for energy efficiency. Already, the 2014 Chicago Energy Benchmarking Report found an enormous opportunity to save money, reduce emissions, and generate jobs from improving nonresidential buildings larger than 250,000 square feet to average levels (50th percentile) or above-average levels (75th percentile) for energy use intensity in their building sector. The report identified potential savings up to 13-23% energy reduction, up to \$44-77 in energy cost savings, and a potential to create more than 1,000 jobs from the investments to achieve those reductions. Improving energy efficiency is a key element of *Sustainable Chicago 2015*, Mayor Emanuel's 3-year action agenda to make Chicago more livable, competitive, and sustainable. For more information on *Sustainable Chicago 2015* visit

www.cityofchicago.org/city/en/progs/env/sustainable chicago2015.html.

#### How much will compliance cost? Will the ordinance make Chicago more expensive?

No. As buildings become more aware of energy use and efficiency opportunities, financial savings will outweigh the low costs of tracking energy use. Administrative or engineering staff can easily benchmark energy using utility data (often at the same time they pay utility bills) with minimal time and cost. For data verification every three years, buildings with in-house engineers, architects, or other certified professionals (such as City College program graduates, as identified by the City) could comply with the ordinance without paying for any outside help.

## Will there be a pilot for this effort?

By staggering the reporting timelines based on building size and type, the City essentially piloted the program with Chicago's largest commercial buildings first. In 2014, the City achieved over 90% compliance, and through partnership with benchmarking stakeholders, provided free support resources to building owners, managers, and their representatives. In 2014 alone, the Energy Benchmarking Help Center had over 800 phone and email interactions, and 375 individual participants attended 16 free trainings. Ongoing support is being provided to buildings reporting in 2015.

## Is energy benchmarking a new idea?

No. In Chicago, nearly 40% of buildings larger than 50,000 feet have already benchmarked energy using Portfolio Manager; excluding schools, Chicago building use of Portfolio Manager grew by more than 100% from December, 2010 through February, 2013. As of April 2015, ten other US cities have some form of benchmarking in place, including New York, Philadelphia, Boston, Cambridge, MA, Washington DC, Minneapolis, Austin, San Francisco, Berkeley, and Seattle – many of Chicago's large building owners and managers also have buildings in these markets.

## What buildings will comply?

The ordinance applies to existing municipal, commercial, and residential buildings larger than 50,000 square feet in the City of Chicago.

#### Are there exemptions?

Buildings may apply for exemption based on the following:

- Financial duress:
  - The building is the subject of a qualified tax lien sale or public auction due to property tax arrearages.
  - The building is controlled by a court appointed receiver.
  - The building has been acquired by a deed in lieu of foreclosure.
- Low Occupancy:
  - The building had average physical occupancy of less than 50 percent throughout the calendar year for which benchmarking is required.
- New Construction:
  - The building is a new construction and the building's certificate of occupancy was issued during the calendar year for which benchmarking is required.

To apply for an exemption, use the online form, found at <a href="www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>.

# Compliance

## What do I need to do to comply?

Covered buildings are required to:

- 1. Benchmark energy use annually: Covered buildings will track energy consumption and basic building characteristics using ENERGY STAR Portfolio Manager, a free web tool from the US EPA.
- 2. Verify energy data every three years: In the first year in which buildings benchmark, and every third year thereafter, buildings will have energy and building data reviewed by an in-house or third-party professional engineer, licensed architect, or other trained individual (accepted credentials to be designated by the city) to verify that data is being tracked and reported correctly.
- **3. Report annually to the City:** Using Portfolio Manager, covered buildings will report basic building and energy data to the City of Chicago, which will report annually on energy efficiency. After a one-year grace period following a building's first benchmarking deadline, the City will be authorized to make some building information publicly-available.

## When do I need to benchmark, verify, and report?

In 2015, commercial and municipal buildings 50,000 - 250,000 square feet and residential buildings over 250,000 square feet will benchmark, verify, and report for the first time. Commercial and municipal buildings that benchmarked, verified, and reported for the first time in 2014 are required only to benchmark and report in 2015; the next required data verification deadline for these buildings is June 1, 2017. First-time benchmarking will be phased in over three years based on building size and sector.

In 2015, all completed benchmarking submissions received by **August 1, 2015** will be treated as in compliance with the ordinance. After 2015, June 1st will remain the ongoing annual deadline.

Building sector	Building size (ft <sup>2</sup> )	Benchmarking Timeline:			
		2014	2015	2016	2017
Non- Residential	≥ 250,000	Benchmark, Verify, Report	Benchmark, Report	Benchmark, Report	Benchmark, Verify, Report
	≥ 50,000		Benchmark, Verify, Report	Benchmark, Report	Benchmark, Report
Residential	≥ 250,000		Benchmark, Verify, Report	Benchmark, Report	Benchmark, Report
	≥ 50,000			Benchmark, Verify, Report	Benchmark, Report

#### How do I get started?

- Visit <a href="www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a> to download the *Compliance Checklist* and the step-by-step *Benchmarking Guide*.
- Set up a profile for your building in Portfolio Manager at www.EnergyStar.gov/Benchmark
- If your building has multiple meters for which you don't have access to bills:
  - Sign-up for ComEd's Energy Use Data System: www.ComEd.com/EnergyTools
  - Request Peoples Gas use data: <u>www.PeoplesGasDelivery.com/business/aggregation.aspx</u>
- For buildings reporting for the first time in 2015: Arrange for professional data verification by a third party, or prepare for in-house verification. See <a href="www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a> for a full list of recognized qualifications.
- Report to the City through the "Report" link at www.cityofchicago.org/energybenchmarking

## My building is ENERGY STAR certified—do I still need to comply?

Yes. If the building has already been benchmarked in Portfolio Manager including energy data for January through December 2014, you can use the existing building profile, but make sure to add the building's Chicago Energy Benchmarking ID.

You may use the ENERGY STAR certification in lieu of the verification process if the property and energy use data used in the ENERGY STAR certification process cover at least six months of the calendar year for which verification is required. For example, a building required to benchmark, verify, and report calendar year 2014 data may use an ENERGY STAR certification based on data that covered at least six months of calendar year 2014, i.e. January 1st – June 30th, 2014 or July 1st – December 31st, 2014. See the *Benchmarking Guide* for detailed instructions.

#### Benchmark

#### How do I benchmark a building?

To benchmark, you will collect building information and whole-building energy use data for January to December of 2014, and use it to create an ENERGY STAR Portfolio Manager profile for the building. See the *Benchmarking Guide* for detailed instructions.

#### Who can benchmark my building?

You may assign a benchmarking lead, who will be responsible for gathering data, entering it into Portfolio Manager, ensuring data verification, and reporting to the City. This person could be the building owner or another designated party, for example back office staff, property manager or operator, leasing agent, or a 3<sup>rd</sup> party energy consultant. If a building already works with an energy service provider, they may offer benchmarking services.

The benchmarking lead will need access to information on building characteristics and operations, so collaboration with on-site staff is essential. This person will also need to know the building's Chicago Energy Benchmarking ID, which can found on a notification letter sent in spring 2015 or from the Help Center.

If the benchmarking lead is not already familiar with Portfolio Manager, training is strongly recommended. The US Environmental Protection Agency offers free online training on their website <a href="https://www.EnergyStar.gov/Benchmarking">www.EnergyStar.gov/Benchmarking</a>. For a list of other local benchmarking training resources, visit

#### www.CityOfChicago.org/EnergyBenchmarking.

## What is ENERGY STAR Portfolio Manager?

ENERGY STAR Portfolio Manager is a free online tool developed by the U.S. Environmental Protection Agency (US EPA) that allows you to track and assess energy and water use across your entire portfolio of



buildings in a secure online environment. With Portfolio Manager, you can calculate the building's energy performance, compare it with similar buildings and monitor it over time.

When you benchmark the building in Portfolio Manager, one of the key metrics you'll see is energy use intensity, or **EUI**. Essentially, the EUI expresses a building's energy use as a function of its size or other characteristics. For most property types in Portfolio Manager, the EUI is expressed as energy per square foot per year. It's calculated by dividing the total energy consumed by the building in one year by square footage. For many building types, Portfolio Manager calculates the **ENERGY STAR rating**, which indicates how efficiently buildings use energy on a 1-100 scale, where a score of 50 indicates average energy performance. Buildings with a score of 75 or better are top performers and may be eligible for the ENERGY STAR certification. Some building types are currently not eligible to receive an ENERGY STAR score, but can still benefit from benchmarking, as Portfolio Manager calculates other energy performance metrics such as EUI.

#### Can I use my existing Portfolio Manager account or building profile?

Yes. If you already have a Portfolio Manager account, you may use it to benchmark a building. If the building has already been benchmarked in Portfolio Manager including energy data for January through December 2014, you can use the existing building profile, but make sure to add the building's Chicago Energy Benchmarking ID. Buildings reporting for the first time in 2015 will also have to have the data verified, and include the verifier's information in the Portfolio Manager PROPERTY NOTES section.

#### What building information do I need to collect?

Portfolio Manager requires basic building information, including:

- Year built, occupancy level, and total gross floor area (including any parking areas that consume energy).
- Primary function, gross floor area, and property use details for each specific space use (including weekly operating hours, number of computers, percent heated / cooled, etc.).
- Chicago Energy Benchmarking ID: a six-digit number found on a notification letter sent in spring 2015 or provided by the Help Center: (855) 858-6878, <a href="mailto:lnfo@ChicagoEnergyBenchmarking.org">lnfo@ChicagoEnergyBenchmarking.org</a>.

Potential sources of this information include building management and operations staff, architectural drawings and other building documents, direct measurements or – as a last resort – tenants or other occupants.

#### What if I don't have access to some building information?

Portfolio Manager has three types of fields: required for all properties, required to generate an ENERGY STAR score (for eligible properties), and optional. The Chicago Energy Benchmarking ordinance requires you to make a good-faith effort to collect and report actual values for the first two categories, in order to generate accurate benchmarking results. If, despite your good-faith effort, you are unable to obtain actual values, you can use Portfolio Manager's defaults where available, provided you check the

appropriate checkbox. For optional input fields that do not affect your ENERGY STAR score or other energy metrics, you can enter your best estimate if you don't have an actual value.

## Where can I find my Chicago Energy Benchmarking ID? What do I do with it?

The Chicago Energy Benchmarking ID is a six-digit number found on the notification letter sent in spring 2015 or provided by the Help Center: (855) 858-6878, <a href="mailto:lnfo@ChicagoEnergyBenchmarking.org">lnfo@ChicagoEnergyBenchmarking.org</a>. You may also request your buildings Chicago Benchmarking ID online at <a href="https://www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>. You must enter your Chicago Energy Benchmarking ID in the UNIQUE IDENTIFIERS (IDs) section of the building's Portfolio Manager profile. Please see the <a href="mailto:BenchmarkingGuide">Benchmarking Guide</a> for step-by-step instructions.

#### What energy use data do I need to collect?

Portfolio Manager also requires monthly, whole-building energy use data, including all fuel types such as electricity, natural gas, district energy, etc. Energy cost data and water data are not required to comply with the Chicago Energy Benchmarking ordinance; if you choose to track them for your own use, data will not be reported to the City.

## What if I don't have access to the utility bills for all the spaces in my building?

Owners and managers of covered buildings may take advantage of data aggregation services provided to covered buildings at no additional charge.

- ComEd: ComEd's Energy Usage Data System (EUDS) allows building owners and property managers
  to retrieve aggregate energy usage data for multi-tenant commercial and residential buildings. EUDS
  instructions and enrollment forms are available at www.ComEd.com/EnergyTools.
- **Peoples Gas:** Peoples Gas offers aggregated natural gas use data for buildings covered by the energy benchmarking ordinance. A link to instructions and information request forms are available at <a href="http://www.PeoplesGasDelivery.com/Business/Aggregation.aspx">http://www.PeoplesGasDelivery.com/Business/Aggregation.aspx</a>.

#### How long does it take to obtain aggregated data from the utilities?

For aggregate electric usage data, you first need to enroll in ComEd's Energy Usage Data System (EUDS), which may take up to 10 business days. Once you are enrolled and you set up your properties in the system, each usage data request usually takes a few hours, but it may take up to 2 days if your request is particularly large. For aggregated natural gas usage data, you should receive the data via email within a few days of submitting your request.

## Can I track common areas' energy usage separately from tenants' usage?

Yes, you can set up separate meters in Portfolio Manager to track any gas or electric account for which you have bills, in addition to aggregated usage data. However, you need to make sure you are not including any duplicated usage in the data you report to the city. If you requested whole-building usage data from the utilities, it will already include any common area account. For this reason, if you also add a common area meter in Portfolio Manager for your own use, you need to exclude it from your energy metrics calculation to avoid double-counting. See the *Benchmarking Guide* for detailed instructions.

#### Can I enter energy bills that are not monthly?

Although this is technically possible in Portfolio Manager, you should avoid it if at all possible. To calculate weather-normalized energy metrics, Portfolio Manager requires energy consumption for periods no longer than 65 days. Therefore, in order to have accurate benchmarking results, if you have monthly or bi-monthly bills you should enter them individually.

# Verify

#### What is verification?

The ordinance requires that building energy data be reviewed in the first year of reporting and then every three years by a qualified in-house or third party professional, such an engineer, architect, or another trained individual designated by the City.

#### Who can be a verifier?

An individual with any one of the following qualifications may verify:

- Professional Engineer (PE) licensed in the State of Illinois
- Registered Architect licensed in the State of Illinois
- Building Operator Certification (BOC) certificate issued by the Midwest Energy Efficiency Alliance
- Building Energy Technology Certificate issued by the City Colleges of Chicago
- Building Energy Assessment Professional (BEAP) credential issued by ASHRAE
- Certified Energy Manager (CEM) credential issued by the Association of Energy Engineers (AEE)

Additional data verifier training programs or credentials may be recognized by the City over time; all recognized programs and credentials will be posted to <a href="www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>. The verifier can be a building staff member, an existing energy contractor, a tenant/occupant of the building, or an eligible third-party.

#### How is the data verified?

The verifier will review and complete the Portfolio Manager Data Verification Checklist and confer with the building owner, manager, or benchmarking lead to address any concerns. Once all data has been verified and is considered accurate, the verifier must sign in the space provided on the last page of the form. The verifier must include his or her name, email address, mailing address, the name of the recognized training program or credential, and any relevant unique identifiers, such as a Professional Engineer License Number, as well as his or her stamp (if applicable). Buildings must retain this form for three years, until the next time you are required to verify your benchmarking data. The signed Data Verification Checklist must be provided to the City, upon request.

## Why is verification important?

Verification helps ensure a high level of data accuracy, and it creates a level playing field for all covered buildings.

#### My building is ENERGY STAR certified—do I still need to verify the data?

You may use the ENERGY STAR certification in lieu of the verification process if the property and energy use data used in the ENERGY STAR certification process cover at least six months of the calendar year for which verification is required. For example, a building required to benchmark, verify, and report calendar year 2014 data may use an ENERGY STAR certification based on data that covered at least six months of calendar year 2014, i.e. January 1st – June 30th, 2014 or July 1st – December 31st, 2014. See the *Benchmarking Guide* for detailed instructions.

# Report

# How do I report?

Go to <a href="www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>, and click on the reporting link. You will be redirected to Portfolio Manager, and you will be able to respond to a data request from the City of Chicago with an automatically generated form.

# What will the City do with the data?

The City will report annually on aggregate energy efficiency trends; for the 2014 report, please visit <a href="https://www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>.

No building-specific information will be publically disclosed for the first year that a building benchmarks and reports. The ordinance authorizes the City to share building-specific data with the public after an initial grace period of one year.

# Free Support

## Where can I go for help?

# **Chicago Energy Benchmarking Help Center**

The Chicago Energy Benchmarking Help Center provides **phone and email support** for all questions related to the ordinance, and it can be reached Mon-Fri, 9:00am-5:00pm at (855) 858-6878 or Info@ChicagoEnergyBenchmarking.org.

#### **Free Trainings**

The City of Chicago and its partners will be offering **free in-person and web-based training** to support buildings covered by the Chicago Energy Benchmarking Ordinance. You can find schedules and registration details at <a href="https://www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a>.

US EPA also offers **free online resources** to help you get started with Portfolio Manager at www.EnergyStar.gov/buildings/training.

# **Building Improvement**

## How will my building benefit from benchmarking?

By providing information about a building's energy use and comparing its performance to similar buildings, energy benchmarking empowers building owners, managers, and other stakeholders to make

more informed decisions, identify opportunities to improve energy use in their buildings, and save money. Evidence of these benefits is already available: by analyzing data from over 35,000 buildings that used Portfolio Manager and received an ENERGY STAR score from 2008 to 2011, US EPA found that average energy use declined by 7%. For more benchmarking trends, visit US EPA's DataTrends Series, found at www.EnergyStar.gov/DataTrends.



Source: Portfolio Manager DataTrends, US EPA

## What can I do to make my building more efficient?

In 2007, the State of Illinois passed legislation requiring energy utilities to set aside ratepayer funds to invest in energy efficiency. The resulting utility incentives expand opportunities for buildings to pursue subsidized energy efficiency improvements that save money and energy.

#### **Private Commercial Buildings:**

- <u>ComEd's Smart Ideas for Your Business® program</u> can help reduce building energy use. Incentives
  and support programs help businesses drive energy savings and an improved bottom line. Please
  visit <u>www.ComEd.com/EnergyTools</u> for more information about online tools and other support.
- <u>Peoples Gas Natural Gas Savings Program</u> offers incentives to encourage business customers make energy-efficient improvements to reduce energy use and enhance workplace comfort.

#### **Public / Government Commercial Buildings:**

 Illinois Energy Now provides state-administered financial incentives to local government facilities, public schools, and state and federal agency facilities that make large-scale improvements to energy-consuming equipment.

#### **Residential Buildings:**

• ComEd and Peoples Gas offer building managers and owners energy efficiency upgrades and incentives through the <u>Multi-Family Comprehensive Energy Efficiency Program</u>.

#### How will this ordinance impact older, historical buildings?

Older and historically significant buildings are not disproportionately impacted by energy transparency. Some detractors erroneously state that older and historically significant buildings would have lower scores, resulting in a competitive disadvantage and negative impact on tenants. This concern is not substantiated by data on tens of thousands of buildings that are already benchmarking energy use through Portfolio Manager.

In Chicago, the 2014 Energy Benchmarking Report found that age and size of buildings had little to no effect on energy use intensity (energy use per square foot of area) for buildings over 250,000 square feet reporting in 2014. In fact, older nonresidential buildings over 250,000 square feet had slightly lower energy use intensity than newer buildings. Similarly, in New York, the city's benchmarking report found that skyscrapers built before 1929 used significantly less energy than newer office buildings.

## Will this ordinance put less efficient / low-scoring buildings at a competitive disadvantage?

No. In fact, low-scoring buildings have the most to gain from benchmarking because they often stand to benefit greatly from no-cost or low-cost energy efficiency options. Energy efficiency analysis shows that operational improvements — many of which can be implemented immediately and at little or no cost to building operators — account for half of energy savings in commercial buildings. In addition, utility incentive programs offer free energy saving measures in multi-family residential buildings, such as aerators and new lighting.

Importantly, because the ordinance does not allow disclosure of the first year's data, buildings can learn from this important information and implement these no- and low-cost solutions before they disclose.

#### How much will less-efficient buildings have to spend to improve their scores?

A lot less than you might think. No-cost / low-cost measures include: using automated timers and schedules to match hours of building use, residential programmable thermostats, motion sensors for lighting, tune-ups of HVAC systems, upgrading air filters, reducing ventilation on weekends (in accordance with Code requirements), resetting temperature set points on water-based heating and cooling systems, water faucet aerators, and many other energy conservation efforts.

# What about non-profits, affordable housing, public buildings, or "mom & pop"-owned buildings?

By targeting buildings larger than 50,000 square feet, the ordinance focuses on owners and managers that are accustomed to much more sophisticated operational challenges than tracking and reporting energy use. More than 85 Chicago-area partners have publicly supported the ordinance. The City is working with these and other partners to provide the Energy Benchmarking Help Center (reached at (855) 858-6878 or <a href="Info@ChicagoEnergyBenchmarking.org">Info@ChicagoEnergyBenchmarking.org</a>), free trainings, and other support resources to all covered buildings. Several of these partners have also agreed to provide pro-bono data verification services for buildings in need. Please visit the Energy Benchmarking website at <a href="www.CityofChicago.org/EnergyBenchmarking">www.CityofChicago.org/EnergyBenchmarking</a> for more information on trainings and pro-bono data verification.

Non-profits, affordable housing, and public buildings are also among those that could most benefit from utility cost reduction, especially resulting from no-cost / low-cost efficiency measures.